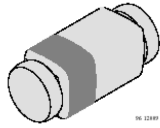
SEMICONDUCTOR
Small Signal Products

MATERIAL CONTENT LIST

PACKAGE FAMILY: **SOD-80 QuadroMELF**
DATE: **20-May-2021**
REVISION: **14**



RoHS
COMPLIANT

MATERIAL CONTENT					
Part	**Material**	**CAS N°**	**weight mg**	**% of weight**	**ppm of total weight**
Plug	Fe	7439-89-6	7.7	44.0%	228411
51.9%	Cu	7440-50-8	4.2	24.0%	124588
	Ni	7440-02-0	5.6	32.0%	166117
	CuO	1317-38-0	Trace		
	TOTAL		**17.5**		
Terminal finish	Sn	7440-31-5	0.468	97.5%	13883
1.4%	Ag	7440-22-4	0.012	2.5%	356
	TOTAL		**0.5**		
Package	PbO *)	1317-36-8	9.56	61.3%	283577
Glass	SiO_2	14808-60-7	4.97	31.9%	147526
46.3%	K_2O	12136-45-7	0.55	3.5%	16196
	Na_2O	1313-59-3	0.00	0.02%	93
	Al_2O_3	1344-28-1	0.02	0.12%	555
	B_2O3	1303-86-2	0.47	3.0%	13883
	Sb^{3+} **)	7440-36-0	0.03	0.2%	926
	TOTAL		**15.6**		
Silicon	Si	7440-21-3	0.0811	477.06%	2406
0.2%			**0.0811**		
Chip	SiO_2	14808-60-7	0.0016	53.33%	47
Passivation	PbO *)	1317-36-8	0.0014	46.67%	42
0.01%			**0.003**		
Chip	Ag	7440-22-4	0.0168	98.82%	498
Metallization	Ni	7440-02-0	0.0002	1.18%	6
0.1%	**TOTAL**		**0.02**		
Ink	Modified Epoxy Resin	Trade Secret	0.0150	50.00%	445
0.1%	2-Hydroxyethylmethacrylat	868-77-9	0.0060	20.00%	178
	trimethylolpropane triacrylate	15625-89-5	0.0030	10.00%	89
	Methacrylated Acidic Compound	Trade Secret	0.0008	2.50%	22
	Phenyl-bis(2,4,6-trimethylbenzoyl)-phosphinoxid	162881-26-7	0.0008	2.50%	22
	Diphenyl(2,4,6-trimethylbenzoyl) phosphinoxid	75980-60-8	0.0008	2.50%	22
	Carbon Black	1333-86-4	0.0015	5.00%	44
	Talc	14807-96-6	0.00225	7.50%	67
	TOTAL		**0.03**		
Total weight			**34**		

Remark: Total weight range ± 10%

*) Pb in glass of electronic components acc. RoHS exempted; Lead Monoxide just raw ingredient for glass production, but not present as such in glass anymore

**) Antimony present as ion

Reflow Soldering acc. J-STD-020

Material Analyses Reports available on request